



KARO ECHO Newsletter

KARO ECHO

Serving the communities
of El Cerrito and
Kensington, California

Web: www.karoecho.net

Facebook:
[KARO ECHO facebook](#)

Email: info@karoecho.net

Important Frequencies

KE Primary: 146.415 MHz
Weekly Net, Thurs. 1900

KE Secondary: 146.475 MHz

4Cs Repeater: 145.110 MHz
(TX down 600 with PL 82.5)

Monthly Meetings

In-person meetings

2nd Monday of each month
7:00 pm

(online via Zoom for now)

Arlington Park Clubhouse,
1120 Arlington Blvd,
El Cerrito, CA

The next meetings are:

June 14th, 2021

July 12th, 2021

Meeting minutes are on
the website in the past
events page.

What's New

KARO ECHO Monthly Meeting, June 14th, 1900 — **ONLINE VIA ZOOM**

The monthly KARO ECHO meeting will be held using the Zoom online meeting app, at the usual time, 1900, Monday June 14th. Look for the link to join in a KARO ECHO email from Howdy KE6BEE. The training session will focus on the how-to of Field Day, and much of the rest of the meeting will cover logistics and outreach/publicity aspects of Field Day. [Full agenda link](#)

Inaugural KARO ECHO Field Day, Saturday June 26th

KARO ECHO is holding a Field Day event on Saturday June 26th, with operation from 11am to 7pm. [ARRL Field Day](#) is the biggest North American radio event of the year and brings out hams all over the country to communicate with each other, predominately from public spaces, offering excellent opportunities for education and outreach. The location of KARO ECHO's Field Day is Upper Canyon Trail Park, just west of the clubhouse at 6757 Gatto. Access via Cutting at Hagen.

A number of operating stations including HF/VHF/UHF bands and voice, CW, and digital modes will be simultaneously in use, all using the new club callsign W6ECK. There will also be a "Get On the Air" (GOTA) station operated by [EBARC](#) hams under their call W6CUS. A GOTA station is an opportunity to get unlicensed individuals to be able use a radio to make distant contacts under the supervision of a licensed ham. Please spread the word to those who are interested in radio and disaster communications preparedness (or just radio in general) and encourage them to stop by for this fun and informative event that could help them get started with radio.

Please review the introduction to Field Day operations at the end of the newsletter, plan to come by and consider signing up for a shift to operate (there will be plenty of help, before and during the event, to get any experience level active).

More help is welcome to organize this Field Day event. To get more involved in the planning or publicity contact Howdy KE6BEE ke6bee@arrl.net and/or Don ni6a@arrl.net This [document has information about equipment and operating shifts and will continue to get updated.](#)

LOCAL NETS**KARO ECHO NET**

146.415 MHz Simplex

Thursday eve, immediately after the West Contra Costa RACES Net, but never before 1900 hours local time.

West Contra County ACS/RACES Net

145.110 MHz repeater

(TX down 600 with PL 82.5)

Thursday: 1845 local time

Contra Costa County HF EmComm/RACES Net

3893 KHz

Thursday: 1835 local time

American Red Cross of the Bay Area (ARCBA)

WW6BAY Repeater

443.975 MHz

TX +5 MHz, PL 100 Hz

Wednesday: 2000 local time

BOARD OFFICERS

President: Hal KK6NDF

Vice-Pres.: Howdy KE6BEE

Treasurer: Larry KK6GIO

Secretary: Tom KN6BUY

Outreach Manager:

Annette, KJ6SWK

Emergency Coordinator:

Howdy KE6BEE

(also newsletter editor and net coordinator)

Webmaestro: Rob K6RJM

What's New *(continued)***Neighborhood nets and Communication Hub Activities**

The first Wednesday of the month has a lot of radio activity in the area.

West county EmComm net out of Richmond at 11 am (starts after the Richmond siren test) FRS/GRMS simplex (on Ch.19, secondary Ch. 17), followed by a ham net on the [WA6KQB 440 repeater](#) with WA6DUR repeater as secondary (see WA6DUR freq. information below)

East Richmond Heights, ham operators check-in at 1845 on Walt's WA6DUR repeater 442.150 +5 offset and PL tone 107.2Hz.

EC4 (central El Cerrito Hills) CERT Net, Ch. 2 (462.5875), at 1845

EC9 (north El Cerrito Hills) CERT Net, Ch. 15 simplex (462.550), at 1900

East Richmond Heights, Ready-2-React Net, Ch. 7 (462.7125), at 1930

EC8 (north El Cerrito) CERT net, Ch.1 (462.5625), at 2000

Ken6 (SW Kensington) CERT net, on first Tuesdays, Ch. 6 (462.6875) at 1900

Richmond simulated EOC net, first Thursdays at 1030, on three simplex frequencies in this order: 147.450, 441.000, 223.400

Albany Radio Net, Wed. (weekly) 1900 on Ch.19 [Albany Radio groups.io](#)

[Coordination of neighborhood FRS/GMRS frequencies can be found here.](#)

New Club Callsign

In February, KARO ECHO was issued the sequential club call KN6NMN. This call is unfortunately awkward (both with and without use of phonetics). On March 27, 2021 the club was issued a replacement vanity call W6ECK (a classic 1x3 W-series call evocative of El Cerrito—Kensington). Howdy KE6BEE is the trustee for the club call.

Welcome New Hams

New El Cerrito licenses issued: [KN6OUC](#)

New Kensington licenses issued: none in past month

Action - Contribute to this Newsletter

Content for this newsletter is always welcome. We are seeking submissions for a new free classified section for selling/trading radio equipment/services. Anyone with events or other content suggestions please send them to the newsletter editor Howdy ke6bee@arrl.net

What's New *(continued)*

USGS Webinar on the Effect of a Hayward Fault 7.0 Earthquake on Telecommunications, June 16

The [USGS HayWired Scenario](#) is a multi-year effort to model and study impacts on the San Francisco Bay area from a magnitude 7 earthquake on the Hayward Fault. As part of their series of webinars on the topic, there is a [free online webinar](#) specifically for the amateur radio audience on June 16th at 7:30pm. It will include an overview and major findings of the HayWired scenario, geographic and sector vulnerabilities for Telecom & ICT, and discussion of policy implications. [PDF flyer](#) [Zoom link](#)

Winlink Demonstration by Walnut Creek CERT Hams, July 6, 7pm

[Walnut Creek CERT hams](#) have demonstrated VHF Winlink email communications over ham radio from all field sites (and Martinez) to the Walnut Creek EOC. [On July 6 at 7pm](#) there will be an MDARC [auxiliary class with the topic of "An introduction to Winlink"](#).

Club affiliation with ARRL

Thanks to the work of Frans KJ6IUV with help from Treasury Larry KK6GIO and Don NI6A, the KARO ECHO application for ARRL club affiliation has been accepted and KARO ECHO is now an ARRL affiliated club. There are many benefits for an ARRL affiliated club, including recruitment tools, PR, additional funding (commissions), etc.

[ARRL affiliated club general description](#)
[Resources](#) [Benefits](#) [Club Kit \(PDF\)](#)

Commission Terms:

ARRL Affiliated Clubs receive a commission for every new ARRL membership and renewal they submit to ARRL Headquarters. Clubs retain a portion of the dues for each regular membership submitted to ARRL Headquarters (clubs retain \$15 for each new membership OR lapsed membership of two years or more). A new member is defined as any individual who has never been a member of ARRL or any individual who has not retained a membership for two or more calendar years prior to the application submission. Clubs retain \$2 for each renewal. A renewing member can renew at anytime, even before their current membership term expires.

Treasurer's Report

[Treasurer's Report May 2021](#)

Larry Vanselow, KK6GIO, Treasurer

APRIL GENERAL FUND1 Beginning Balance \$1068.63

Income: December dues payments: none

Total General Income: \$20.00

Donations..... \$20.00

Total General Disbursements \$124.80 (Field Day park rental)

Ending Balance \$964.13

(Portion as petty cash..... \$0.00)

Activities

Weekly Net Control Rotation

Thanks go out to the volunteer stations who have been taking turns as Net Control Stations (NCS) each Thursday. This rotation has been working very well and everyone has been doing a great job. The regular NCS roster has 9 operators. We have one opening as an opportunity for others to fill in. Please volunteer to give it a try. [Download the new Net Script for NCS operators.](#)

Below are the current scheduled dates for each operator. The [KARO ECHO google calendar](#) also has these assignments and can be found at the bottom of the events page. Add to your electronic calendar By pressing the "+GoogleCalendar" button in the lower right.

Net control is a skill that many operators should have and regularly practice. Please contact Howdy ke6bee@arrl.net if you are interested in taking a net control assignment.

Callsign	Name	Assigned Dates (skipped: 11/26/2020, 11/25/2021, 12/24/2020, 12/31/2020)						
KE6BEE	Howdy Goudey	9/17/2020	11/19/2020	2/11/2021	4/15/2021	6/17/2021	8/19/2021	10/21/2021
KK6NDF	Hal Graboske	9/24/2020	12/3/2020	2/18/2021	4/22/2021	6/24/2021	8/26/2021	10/28/2021
KM6HBO	Jamuel Starkey	10/1/2020	12/10/2020	2/25/2021	4/29/2021	7/1/2021	9/2/2021	11/4/2021
	Open	10/8/2020	12/17/2020	3/4/2021	5/6/2021	7/8/2021	9/9/2021	11/11/2021
K6RJM	Rob McNicholas	10/15/202	1/7/2021	3/11/2021	5/13/2021	7/15/2021	9/16/2021	11/18/2021
KE6HCE	Armando Picciotto	10/22/202	1/14/2021	3/18/2021	5/20/2021	7/22/2021	9/23/2021	12/2/2021
NI6A	Don Simon	10/29/202	1/21/2021	3/25/2021	5/27/2021	7/29/2021	9/30/2021	12/9/2021
KN6CMR	Susan Yeaman	11/5/2020	1/28/2021	4/1/2021	6/3/2021	8/5/2021	10/7/2021	12/16/2021
KK6ZPM	Karen Fenton-Leong	11/12/202	2/4/2021	4/8/2021	6/10/2021	8/12/2021	10/14/2021	12/23/2021

Thursday Net Training Exercises

Following the net check-ins every Thursday at 1900 on 146.415, KARO ECHO usually runs a training exercise to learn and practice skills that are important for successful disaster communications.

[A list of potential training exercises](#) is posted and maintained on the training page of the website.

[A log of our check-in counts can be found here.](#) Howdy KE6BEE typically updates this document in real time during the net, so you can check it against your log during or after the net.

We averaged 21 check-ins/week in 2020 with a high of 28. So far in 2021, we are averaging 20/week with a high of 25. Thanks for your participation. Keep it up!

Thanks to Jay KJ6WSS for filling in as net control and volunteering an exercise about long duration battery operation during an emergency. As a follow-up to the discussion [here is a table with various runtimes](#) for different size batteries and transmitted RF power levels, based on measurements of a large number of radios. It covers both HTs and larger radios, but is focused on using larger 12V batteries, not handheld batteries.

About KARO ECHO

KARO ECHO is the name of the Kensington Amateur Radio Operators and the El Cerrito Ham Operators mutual benefit association, an all-volunteer non-profit group of amateur radio operators providing auxiliary communications for the cities of Kensington and El Cerrito in the event of a disaster. KARO ECHO works with CERT (Community Emergency Response Teams) in Kensington and El Cerrito, but is not an official part of the CERT program.

Monthly in-person meetings of KARO ECHO are on the 2nd Monday of each month at 7:00 pm, online using Zoom. The next meetings are:

- ♦ June 14th, 2021
- ♦ July 12th, 2021

Yearly membership dues are \$30/year for individuals, \$40/year for a family membership. Payments can be given to the Treasurer at monthly meetings or mailed to the address below. Participation is welcome independent of paid membership, but only licensed amateur radio operators who are dues paying KARO ECHO members will be allowed to vote on KARO ECHO business. Dues cover our 510c3 registration, post office box, web page, station operating manuals and more. Your input on useful expenditures to aid emergency communications is welcome.

Mail to: KARO ECHO, PO Box 2025, 6324 Fairmont Ave, El Cerrito, CA 94530-3651

Please see our website for more information: www.karoecho.net

You can contact the KARO ECHO board by email: info@karoecho.net

KARO ECHO Facebook

The [KARO ECHO Group on Facebook](#) has a lot of good information, more than is contained on our website. There is a whole wide world of emergency communications information at <https://www.facebook.com/groups/1451216838315743/> Check it out and be inspired of what we can do to help disaster victims in our community.

Weekly Training Net

The Karo-Echo Weekly Training Net meets every Thursday evening immediately after the West Co Co County RACES/ACS Net; but not before 1900 on 146.415 MHz Simplex. Details at <https://www.karoecho.net/events>

KARO-ECHO Frequencies

The KARO ECHO primary frequency is 146.415 MHz simplex. Our secondary frequency is 146.475 MHz simplex, a 60 KHz spread between operating frequencies reduces adjacent frequency interference.

Newsletter Content Wanted

Any input on content you'd like to propose for inclusion in the KARO ECHO newsletter can be sent to Howdy ke6bee@arrl.net We welcome all ideas for content including announcements, events, etc.

Outreach, Education and Licensing

Write-up of message handling exercise

There is a [writeup of a recent messaging exercise](#) on the KARO ECHO website that covers prowords and fills and other guidance for operators when passing written messages.

Local and Online Ham License Classes and Exams

COVID restrictions have changed ham license classes and exams. Many are now offered in distanced/outdoor venues or entirely online. See a [list of opportunities on the KARO ECHO website](#)

Recruiting Additional Communications Coordinators

Read the [Neighborhood District Radio Communications Coordinator \(DRCC\) plan](#) written by Don NI6A.

Training for Beginning Operators

Thanks to Jay KJ6WSS, Edward KM6UBY and Karen KK6ZPM for their May 23rd introductory radio class, with emphasis on the GMRS radio BTECH-V1. [A recording of the class and other resources are available here.](#)

Net Control Operator Training

Diane KK6RED, David KJ6AAT and Howdy KE6BEE taught an Apr 4th net control class for C8 the county wide CERT organization. There was a great reception to this class across the county and we inspired many groups to expand the scope of their net trainings. [The class recording is available here.](#)

EMCOMM related videos

See the CERT SET Youtube video link

<https://www.youtube.com/watch?v=66DdgGLIn4c&list=PLROOaUIKdrEgSID1bQJZojW3PzfURoEY-&index=144&t=0s>

Post Camp Fire GMRS organization

https://www.youtube.com/watch?time_continue=220&v=aZiSC4sgKYw&feature=emb_logo

ELMERING

An online elmering forum can be accessed by emailing elmer@karoecho.net or browsing the associated google group. More in-depth elmering/mentoring is available by request.

In the meanwhile, please check out the plethora of useful information at <https://www.karoecho.net> website.

Encouragement to Monitor 146.415 and Explore Other Nets

During the current shelter in place, with time spent at home, it is a good opportunity to use your radio and monitor 146.415 (call out for others occasionally and make some casual contacts). There are a lot of other nets around the bay area that you can reach. Expand your radio horizons. See the [KARO ECHO Coordination page](#) for a listing of some other nets to explore. You can just listen at first, or program your radio (if a repeater is used) and try transmitting as a guest check-in to see if you can make contact.

KAROECHO.Net Website

Especially, check out the EVENTS Page (<https://www.karoecho.net/events>) and the WORKSTREAMS drop-down menu which will lead one to an extensive training page that provides online learning at your own pace. Everything from the very beginning to advanced EmComm operations is detailed. The RESOURCE page has many excellent outside links.

- ♦ This [new heading on the Events page](#) will be updated with recent additions to the website.
- ♦ If you are on Facebook, contribute to the KARO ECHO Facebook Group Page at <https://www.facebook.com/groups/1451216838315743/>
- ♦ If you haven't already filled out the JOIN form please do. Find it as a drop down menu under "Get Involved" See <https://www.karoecho.net/join>
- ♦ A [follow-through novice primer](#) has been put on the website for new hams once they have bought their radio and want to learn more.
- ♦ A [dual-band antenna primer](#) for new hams who want to graduate from the rubber-ducky world
- ♦ Note that the Tram 1480 gain dual band antenna is currently still available for \$51 (no tax and free shipping) on ebay or from Home Depot. That and an inexpensive speaker tripod is a dynamite combination for portable operation. This antenna is equivalent to the Diamond X-200a antenna which sells at HRO for \$125.00 before taxes and shipping.
- ♦ For newbies, please visit <https://www.karoecho.net/workstreams/training> and read the study materials. It is all there except for hands-on experience. Ask questions!
- ♦ Following the Thursday evening net check-in, there is often a training session and/or discussion.
- ♦ All recent KARO ECHO [Minutes will be found at our Past Events page](#) We are now including past Executive Board Minutes as well. [Newsletters are on the Documents Page](#).

If you desire to be removed from this email list, please email info@karoecho.net

Other Resources

"ALERTWildfire" camera links in our area:

[William Rust Summit cam](#)

[Wildcat Canyon cam](#)

[Vollmer Peak cam](#)

[Nichol Knob cam](#)

[View real-time data from any weather station in the state.](#)

[Albany Radio Groups.io forum](#)

[Eastbay Resilience Groups.io forum](#)

[Marina Bay Neighbors and 1st Wed West county GMRS net](#)

Field Day—The Basics

There is a wealth of information about Field Day online, beginning with the [ARRL Field day website](#), as well as a lot of information in the [40 page Field Day packet](#). While it is possible to get quite deep into the rules and optimizing the collection of points for the contest, that is not KARO ECHO's (or most clubs) focus of the event. Field Day is a fun opportunity to setup portable operations and power, practice skills, learn from each other and demonstrate to the public what ham radio can do.

Still, it is essential to know the basics of how the event operates. Here is a brief summary to get started. The fundamental element of Field day communications is "the exchange." For any Field Day site this is determined by the number of simultaneous operating stations established, followed by a letter designation "class" of the site. Three transmitters at a portable club entry is designated 3A (voiced 3 alfa). The stations/class is followed by a two or three letter [ARRL section abbreviation](#), often a state, but in our case it is EB (voiced echo bravo) for East Bay. Some operators will say the name of the section rather than voice the abbreviation (for instance "Santa Clara Valley" instead of "sierra charlie victor." Whether the mode is voice, digital or CW, the radio operators goal is to send their callsign and exchange and receive the other operator's call sign and exchange to complete the communication.

That's the exchange, but you need to find another operator to have the exchange with. You can tune around and listen for CQ calls, or you can find an open freq. or wait for an opening on a freq. to call CQ yourself. Don't be shy about calling CQ. Field day works if there is traffic on the air to respond to. No one makes contacts if everyone is quiet (but of course be mindful not to intentionally cause interference with other transmissions). If you are on an open frequency you might have to call CQ repeatedly to attract attention, or be heard by others scanning around or looking at a spectrum display.

A typical voice exchange:

CQ field day W6ECK, CQ field day W6ECK

W6ECK N1LS

N1LS please copy three alfa echo bravo

W6ECK copy three alfa echo bravo, I am one echo whiskey mike alfa

N1LS copy your one echo whiskey mike alfa, 73

CQ field day W6ECK . . .

Others listening may contact you without having to call CQ again.

Logging contacts is an important part of the process (another person can help the radio operator log). The entire Field Day site (using the same callsign) may work a particular callsign once per band, per mode (voice, CW, digital). Logging and organization about bands and modes avoids duplicates or "dupes."

KARO ECHO Classifieds

We are soliciting classified ads from KARO ECHO members, and friends, to facilitate gifting, swapping, selling radio gear and/or offering help/services such as loans of special equipment/tools, etc. Please send any content to the newsletter editor, Howdy ke6bee@arrl.net

ARRL license plate frame

\$0.75 for full KARO ECHO members

\$1.50 for others

Proceeds go to KARO ECHO



Free Elmer support for KARO ECHO by Don NI6A. Phone, email and home consultations regarding antennas, SWR, assembly of coax and Anderson power pole connectors, lending of special test equipment, etc. Contact: elmer@karoecho.net for "free advice"

Loaner radios/antennas/meters available for trial/testing, including:

HTs: Baofeng UV5R, UV-82HP, UV82x3 (triband), TYT UV8000E, Alinco DJ-580T, Motorola T200TP (FRS)

mobile: Baofeng UV-25x4, Kenwood TK-880 (GMRS/440), Kenwood TM-741A, Alinco DR-235TmkIII (220)

digital mode: Alinco DJ-MD5TGP (DMR), Baofeng DM-1701 (DMR), **2.4 and 5.8 GHz mesh network nodes**

digital interfaces: [Signalink](#), [Mobilinkd](#), [TNC-Pi](#)

meters: Surecom SW-102 digital SWR/power meter

Contact: Howdy ke6bee@arrl.net